

we need a comprehensive strategy to effectively deal with "all" the threats we face.

Given the stakes of this situation and the ongoing confusion about the President's and the administration's policy, we should expect no less.

ENERGY POLICY

Mr. DORGAN. Mr. President, midday today President Bush is going to give a speech here in Washington, DC, on the subject of the development of fuel cell vehicles and moving to a hydrogen economy.

I was glad to hear the President express support for the concept of hydrogen and fuel cells in his State of the Union Address. After his speech, I gave him credit for discussing that with the American people.

Since last year, I have made a number of presentations on the Senate floor about fuel cells. Today, I would like to share with my colleagues my thoughts about the development of a hydrogen economy and the use of fuel cells in our future.

I have told all my colleagues previously that my first vehicle when I was a kid was an antique car I purchased for \$25. It was a 1924 Model T Ford. I am sure people are tired of hearing me talk about it. I was 16 years old, and I was the owner of an antique 1924 Model T Ford. I restored it. It took me a year and a half to 2 years to do that. I lovingly restored this old Model T. Then I sold it. I discovered, later in high school, that I wanted to date, and a Model T was not exactly a modern way to date.

The point of the story is, when I was a kid I put gasoline in a Model T Ford—a 1924 Model T Ford—the same way you put gasoline in a 2003 Ford. Nothing has changed in three-quarters of a century. You pull up to a pump. You pull the hose and put the nozzle in the tank and pump gas. The core technology has not changed.

Over the years, however, our dependence on a foreign source of that petroleum has worsened, and become very dangerous for our economy.

Yesterday, the Secretary of State made a presentation at the United Nations about the country of Iraq. Frankly, Iraq produces a lot of oil. So do other countries in that region.

It is a very troubled region. Yet our economy is dependent on foreign sources of energy, much of it from that region. Is that something that makes sense for us, for the American economy, for the American people? The answer is no.

By talking about a technological change to a hydrogen economy and to the use of fuel cells, I am not suggesting we should not and will not mine for coal, drill for oil and natural gas. I believe we will continue to use fossil fuel in our economy for a long while. And I believe we need to do that.

But we also need to understand that it is time to change. After a century of

running gasoline through the carburetors of our vehicles, it is time for our country to think in different ways, about how can technology change our energy future. I would like to talk a bit about that.

Again, let me say that I credit the President for talking about it in his State of the Union Address. I think this is a step forward on the part of the administration—a baby step to be sure—but an important step.

Mr. President, \$1.2 billion is what the President announced last week and is talking about today. That is not all new money. In fact, the majority of it is not new money. So it is a timid, small step forward, but, nonetheless, a step in the right direction, for which I give this President credit.

Let me talk a bit about why we need to take strong action. I have in the Chamber a chart that shows oil consumption—in millions of barrels per day. This shows total demand, and you see the line going up, up, up, and up. It also shows transportation demand, and that growth in transportation demand is the bulk of the growth in energy needs and energy usage in our country.

As you can see from the chart, shown here is domestic production. Domestic production does not come close to meeting the demand that exists in our country. So what do we do to meet the difference? What we do is we import oil from other parts of the world.

The issue of energy security is a significant issue for all of us. The White House issued a press release on that subject in connection with its hydrogen proposal, noting the gap between our projected demand for oil and our domestic supply. And that gap is going to increase, not decrease—even if we would drill in ANWR, which I do not think this Congress will decide to do.

This is what the White House had to say in proposing development of fuel cells:

America's energy security is threatened by our dependence on foreign oil.

Absolutely. There is no question about that.

America imports 55 percent of the oil it consumes; that is expected to grow to 68 percent by the year 2025. Nearly all of our cars and trucks run on gasoline. They are the main reason America imports so much oil. Two-thirds of the 20 million barrels of oil Americans use each day is used for transportation.

The President went on to say:

Fuel cell vehicles offer the best hope of dramatically reducing our dependence on foreign oil.

If tonight, God forbid, a network of terrorists interrupted the supply of imported oil to this country, tomorrow morning this economy would be in desperate, desperate trouble. That is the jeopardy we have in this country with our dependence—overdependence—on foreign sources of energy.

Let me describe where this dependence resides. And one can make one's own judgment about the stability of it all.

Our top supplier of oil is Saudi Arabia. That is not exactly describing a region of stability. Saudi Arabia is our top supplier. And then you have Mexico, Canada, Venezuela, Nigeria, Iraq, Angola, Norway, Colombia. Mr. President, 3.4 million barrels are imported into this country from these countries. And you understand—everyone understands—that Venezuela is in trouble. There is enormous turmoil in the country of Venezuela. Saudi Arabia, Iraq—these are areas of the world where there is not great stability.

It makes no sense to continue along, merrily whistling our way into the future, believing that our country will be just fine even as our economy is so dependent on sources of oil from outside our borders.

One-third of our oil comes from the Middle East. Iraq is the sixth largest supplier of oil; Venezuela is the fourth; Angola and Colombia, the seventh and ninth—both countries are also plagued with difficulties.

Hydrogen fuels offer a way out. The supply of hydrogen is inexhaustible. It is everywhere. It is in water. The issue of hydrogen fuels is an interesting one. The notion of using hydrogen and the development of fuel cells is not new. In fact, a man named William Robert Grove was one of those larger-than-life characters who in the 19th century could do almost anything. He studied law at Oxford, became a barrister and a judge. In his spare time, he was also a professor of physics. He ran into a patch of ill health and had his legal career interrupted, so he turned to science to occupy his time, and he developed what he called a gas voltaic battery, the forerunner of modern fuel cells.

He based his experiment on the notion that sending an electric current through water splits water into oxygen and hydrogen. He figured if you could reverse the reaction, combining hydrogen and oxygen, you can produce electricity and water. In effect, he burned the hydrogen to produce electricity.

Hydrogen can be derived from all sorts of energy sources. You take the hydrogen from water and use it to move through a fuel cell and use it to power an automobile and out the back tailpipe, you get water vapor. What a wonderful thing.

This is a picture of a Daimler-Chrysler fuel cell vehicle that in June of last year went from San Francisco to Washington, DC. This technology exists. It is being perfected.

The next chart shows a Ford fuel cell vehicle ready for production, a prototype, in autumn 2002. This is not a futuristic technology; there are fuel cell cars on the road today. I have driven a fuel cell car out in front of the Capitol Building, a car that is run by batteries powered by a fuel cell, that is using hydrogen as a fuel source.

The challenge is to make this technology cost effective. I have been meeting with the CEOs and representatives of companies, Shell Hydrogen,

Methenex, UTC Fuel Cells, Union of Concerned Scientists, Siemens Westinghouse, just to name a few, to get their ideas. A broad coalition of interests is coming together because they recognize the promise of a hydrogen technology, going to a hydrogen economy using fuel cells in our future.

I mentioned a Ford Focus fuel cell car. Here is a picture of Ford Focus fuel cell car that is being filled at a hydrogen fuel station. If we were to convert the automobile fleet to fuel cells, what would we have to do? We would have to build vehicles with fuel cells. We would have to find a reliable supply of hydrogen, determine how we will get the hydrogen, and then we have to have the infrastructure, fueling infrastructure and stations and technology to make this a commercial reality. That is one of the issues we have to deal with.

Fuel cell cars don't have to be limited in size to a Ford Focus. For example, Nissan has another fuel cell prototype car—we are seeing more and more companies involved in this—the Nissan Xterra, fueled by compressed hydrogen, tested on California roads in the year 2000.

General Motors now has an innovative prototype called the Hy-wire. This particular car has a detachable exterior so you can buy multiple exteriors with one chassis so you can switch between an SUV or sedan. It has no steering wheel or pedal. It is operated with a joystick. This is a fuel-cell-powered vehicle.

To make this vision a reality, the private sector is going to need public investment. You might ask, why is that the case? Virtually all of the new technologies, the pole vaulting to new technologies, requires Federal involvement, requires governmental involvement. People these days forget, when they go on their computers and on to the Internet, they don't remember that the Internet exists because the Government developed a project to create the Internet. Otherwise, the Internet would not exist. That was a government creation that then became privatized, democratized, and is now a ubiquitous presence all around the world.

If we are going to change the basic construct of our vehicle fleet—and yes, stationary engines and other approaches to the use of power as well—but especially with respect to vehicles, because of what I described with the increased use of oil in our transportation fleet, the only way that will happen is if we do what we have done in other major technological challenges: We need to think big. We need to be bold.

When we decided we were going to explore space, President John F. Kennedy said, we will put a man on the Moon, and he set a time deadline. America is going to put a man on the Moon.

We need an Apollo-type project with respect to the development of a hydrogen-based economy and the use of fuel cells, especially in our transportation fleet.

We need an Apollo-type project—not timid, not baby steps, bold, big steps—that says: Here is our goal. Here is what our country intends to do, and here is how.

The President has proposed \$1.2 billion over 5 years for this fuel cell initiative. About \$700 million at most is new spending. And his proposal has substantial redirection of funds from a range of other technologies we also need to be developing: solar energy, wind energy, biomass, and the other renewable and limitless sources of energy that exist. We need to continue to fund the research that is so important on those limitless sources.

This initiative—one the President supports, one I credit him for supporting—in my judgment deserves a strong financial commitment and aggressive and strong goals to be set. It should not come at the expense of research into other renewable sources of energy.

The Europeans are investing big in hydrogen. As discussed in a New York Times article in October, the European Commission has committed \$2 billion over 5 years. They want to have a hydrogen economy. The Japanese are betting big on hydrogen, as discussed in a Business Week article. The Business Week article says that:

Tokyo's fuel cell initiative has all the hallmarks of a farsighted strategy and calls to mind Tokyo's blossoming success in hybrids. Americans are snapping up these fuel-efficient, environmentally friendly cars. Fuel cells could turn out to be a bigger, more important chapter in the same book.

I propose legislation that is bold. It is an Apollo-type project that says: Let's set bold goals, \$6.5 billion in a 10-year program for hydrogen fuel cell research, development, and infrastructure. I have been working with a number of industry leaders in natural gas, oil, energy, methanol renewables, and fuel cell industries. Interestingly enough, the very companies that are now involved in the development of oil and natural gas and electricity are the companies that are going to be involved in this technology. They are the ones on the leading edge, involved in cutting-edge technology with respect to a hydrogen economy.

This initiative will not displace current energy firms. They will be very actively involved in the creation and development of this new future.

What I propose is a substantial boost over what the President is proposing to date, saying it is the right direction, but it is many steps short. Let's do this and do it boldly. We need to fund infrastructure, fund research, and set goals. R&D funding, pilot projects, yes, tax incentives for consumers who buy fuel cell vehicles, all of that is necessary. But it needs to be broad, bold, new money, not reprogrammed money, something that catches the imagination of the American people that we can make a change and decide our country will not be held hostage by oil coming from unstable regions of the world.

Is \$6.5 billion a significant investment? Absolutely. But over 10 years, my plan would cost an amount equal to less than 1 percent of the President's proposed \$675 billion tax cut.

Now, in our debate over energy, there will be discussion about where we should drill for oil. As I said before, my State produces oil, coal, and natural gas. I believe we are going to continue to do that, and we should. But if our strategy in energy is only to dig and drill, then our strategy should be called "yesterday forever." And that is not going to solve the problem of dependence on foreign oil.

In 2000, the president of Shell Oil attended the World Petroleum Congress, and this is what he said:

If the world thinks that carbon dioxide emissions should be reduced, I see this as an opportunity. The stone age didn't end because they ran out of stones, but as a result of competition from the bronze tools which better meet people's needs. I feel there is something in the air. People are ready to say this is something we should do.

You know, that is what our charge is at this point—to think ahead. We should not develop a policy and debate a policy that is simply "yesterday forever," and not to ignore the needs of those that produce coal, natural gas, and oil. We need to work with industry leaders to make them part of the solution, part of the answer, part of the cutting-edge change that will lead us to a hydrogen-based economy, with fuel cells powering not only stationary engines, but especially that part of our energy usage that is growing so rapidly, transportation.

I started by talking about my old Model T that I bought as a young boy. I am hoping that in years to come, someone walking into a showroom to buy a new car will be able to buy a really "new" vehicle, powered by fuel cells, a vehicle that is part of a new hydrogen-based economy, one that can move this country into the future, strengthen its economy, and rescue us from dependence on a supply of oil from such enormously troubled parts of our world.

Will Rogers used to say:

When there is no place left to spit, you either have to swallow your tobacco juice or change with the times.

On energy, there is "no place left to spit," in the vernacular. We have to change. We need to move beyond the same tired debate of where are we going to dig and drill. Let's work with those that produce fossil fuels and say you are valuable to this country and to our economy and will always be. Let's work with them to say you will also be the pioneers in the development of a hydrogen economy, developing fuel cells for our future. We can do that. This President says, let's move in that direction. I say, absolutely, good for you. But I say let's do more than just move. Let's be bold, establish a national goal, and make this happen.

ASBESTOS IN ATTIC INSULATION

Mrs. MURRAY. Mr. President, I rise today to share a story with my colleagues. It's a true story about a family who happened to live in a neighborhood in Spokane, WA. They could have easily been in Memphis or Minneapolis or Midland as well. But they lived in my State, in Spokane, a typical American city in Eastern Washington.

Mr. President, as part of realizing their American dream, Ralph Busch and his wife Donna bought a house. They were newlyweds, and this was the home they bought after getting married. They soon discovered that it needed roof repairs, and so Ralph spent quite a bit of time in the attic, working on his roof.

The following year they found they had to renovate an addition that was put on the house in the 1950s.

They both had full-time jobs, so they spent many nights and weekends working on their home. They knocked down walls and tore through the old insulation, drywall and wood. They sanded and hammered and spent two entire years fixing up the place.

One morning, Ralph was reading the newspaper. Just by chance, he came across a story about a company that manufactured a household insulation called Zonolite. This insulation, he read, was tainted with deadly asbestos.

Ralph suddenly realized that Zonolite was in his home.

Ralph Busch was stunned as it dawned on him. He had just spent two years in his own home handling Zonolite insulation and he and his wife may have unknowingly been exposed to deadly asbestos.

What would happen from his and his wife's exposure?

How come no one had told him he had asbestos in his attic?

The Zonolite insulation was a product from the little town of Libby, MT. It was produced by the W.R. Grace Company.

W.R. Grace mined vermiculite from the hillside near Libby. The company turned the ore into insulation known as Zonolite by heating vermiculite to expand it into light granules.

The process was similar to popping popcorn. After sorting the popped vermiculite, W.R. Grace poured it into bags and sold it to use as insulation.

The company marketed Zonolite as "perfectly safe". . .

But laced throughout the vermiculite in the ground near Libby, another mineral was present: asbestos. W.R. Grace's process to make Zonolite and other products could not, and did not, remove all the asbestos from the end product. Zonolite insulation contains between .5 percent and 8 percent asbestos.

The community of Libby has suffered immensely from decades of mining the deadly vermiculite ore used to make Zonolite insulation and other consumer products.

At least 200 men and women from Libby have died from diseases caused

by exposure to asbestos-tainted vermiculite, and hundreds more people from the town are sick.

When inhaled, asbestos can cause deadly diseases, from asbestosis to mesothelioma, a deadly cancer of the lining of the lung that is almost always fatal. In fact, mesothelioma kills at least 2,000 people each year and is caused only by asbestos.

The diseases induced by exposure to asbestos result in horrible deaths and they are nearly always fatal. Treatment is harsh and debilitating.

These diseases can take years to strike. The late Congressman Bruce Vento and the father of the modern Navy, Admiral Elmo Zumwalt both died from asbestos they had been exposed to years earlier.

The asbestos-tainted insulation manufactured by the W.R. Grace Company was used in homes throughout the country for decades.

Vermiculite from Libby first started being sold commercially in 1921, and W.R. Grace bought the mine in 1963. Reviews of invoices indicate that more than 6 million tons of Libby ore was shipped to hundreds of sites nationwide for processing over the decades.

This chart behind me shows more than 300 sites across the Nation, where ore was processed, in many cases to make Zonolite insulation.

In internal memos and e-mails, the Environmental Protection Agency has estimated that as many as 35 million homes, schools and businesses may still contain this insulation. Moreover, W.R. Grace knew the Libby mine contained asbestos when the company purchased it in 1963. But Grace made millions of tons of Zonolite anyway and unabashedly marketed it as "safe."

If the manufacturer of this insulation knew it was contaminated with asbestos, why didn't it or the Federal Government make sure that Ralph Busch and millions of others across the country knew to leave it alone?

The answer to the first question is that W.R. Grace still claims its product isn't harmful. The answer to the second question is more complicated.

According to published reports and internal EPA documents, the EPA was preparing to tell the American people about the dangers of Zonolite insulation. But it didn't happen.

An investigation by Pulitzer Prize-winning reporter Andrew Schneider found that last spring while it was addressing the public health crisis in Libby, MT, the EPA was preparing to tell the American people about the dangers of Zonolite insulation in millions of homes across this country. But first, EPA had to deal with Libby. EPA decided it needed to minimize the exposure of Libby residents to asbestos-contaminated vermiculite, and the agency drafted a press release announcing its decision.

This document said that EPA:

. . . will spend \$34 million to remove dangerous asbestos-contaminated vermiculite insulation from 70 percent of residential and commercial buildings in Libby.

I am glad that EPA has taken aggressive steps to protect people in that small Montana town.

Senator BAUCUS deserves tremendous credit for the work he has done to bring Federal resources to Montana to help people in Libby.

And EPA deserves credit for doing the right thing, and going in to remove the insulation from Libby.

But what about the rest of the country? What about the millions of other homes with Zonolite insulation?

Since EPA decided to help Libby, the agency anticipated the logical follow-up question of what about the millions of homes nationwide that contain the same Zonolite insulation as homes in Libby.

According to the St. Louis Post-Dispatch, the EPA had drafted news releases, and drawn up lists of public officials to notify. The agency was preparing to embark on an outreach and education campaign to let people know about this hazard in their homes.

But what stopped EPA from following through with its warning?

It may have been the same person or people who blocked another government health agency from warning workers about asbestos exposure.

Last April, the National Institute for Occupational Safety and Health—NIOSH—was preparing to release new guidance for workers who come into contact with insulation in the course of their daily work.

NIOSH was preparing to alert workers, such as electricians, plumbers and maintenance workers, about how they can better protect themselves from exposure to asbestos in Zonolite insulation.

These materials were prepared last April, but they still have not been released.

Let me read from a "Pre-Decisional Draft" of a NIOSH Fact Sheet dated April 11, 2002.

I ask unanimous consent that it be printed in the RECORD in its entirety.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

NIOSH RECOMMENDATIONS FOR REDUCING RISK OF WORKER EXPOSURES TO VERMICULITE THAT MAY BE CONTAMINATED WITH ASBESTOS

A vermiculite deposit formerly mined in Libby, Montana was contaminated with asbestos, raising concerns about occupational and public health risks to former miners, residents of Libby, and to workers and consumers who come in contact with vermiculite end-products, such as insulation and potting soil. This fact sheet summarizes existing recommendations by the U.S. Centers for Disease Control's (CDC) National Institute for Occupational Safety and Health (NIOSH) for reducing risk of worker exposures to asbestos or to materials that may be contaminated with asbestos. These recommendations serve as interim guidance from NIOSH for employers and workers involved at sites where vermiculite used as attic insulation or for other purposes may be contaminated with asbestos. NIOSH is conducting further research on vermiculite to provide more information on exposures that may pose the highest risks to workers.